MCD-C SERIES

Leaded Power Inductors

■ FEATURES

The MCD-C series power inductors have low DC resistance and large permissible DC current with high reliability.
Magnetic shielded products are available for each series for the consideration of against radiation.
The MCD-C series has high saturation magnetic-flux density and high efficiency.

■ APPLICATIONS

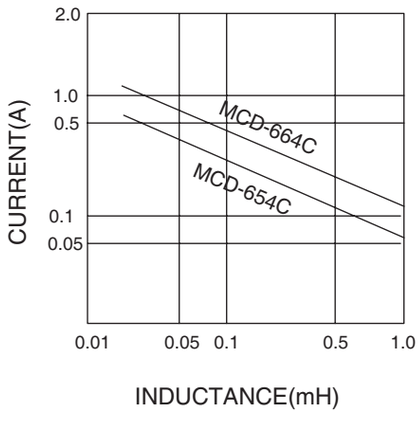
For the smoothing circuit of DC-DC converter, as a choke coil or chopper coil.
Suitable for use in power lines of camcorder, LCD set, OA equipment, notebook computer, PDA, and small size communication equipment.

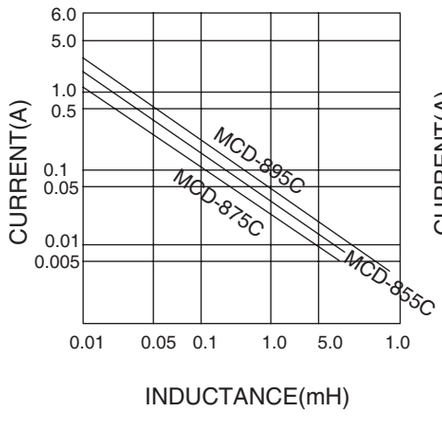
■ PRODUCT IDENTIFICATION

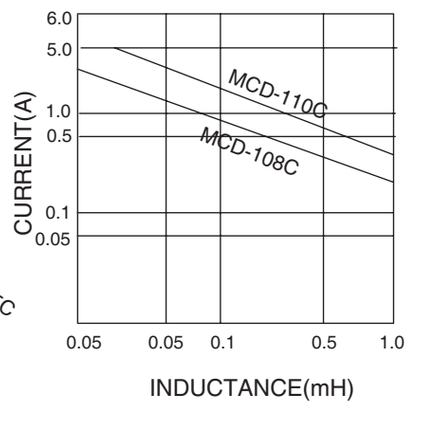
❶	❷	❸	❹	❺	❻ ❼
MCD	- 654	C	- 101	K	U □□

❶ Product Code
❷ Core Dimensions
❸ Core Code
❹ Inductance Code
❺ Tolerance Code
❻ UL Tube
❼ Pattern Code

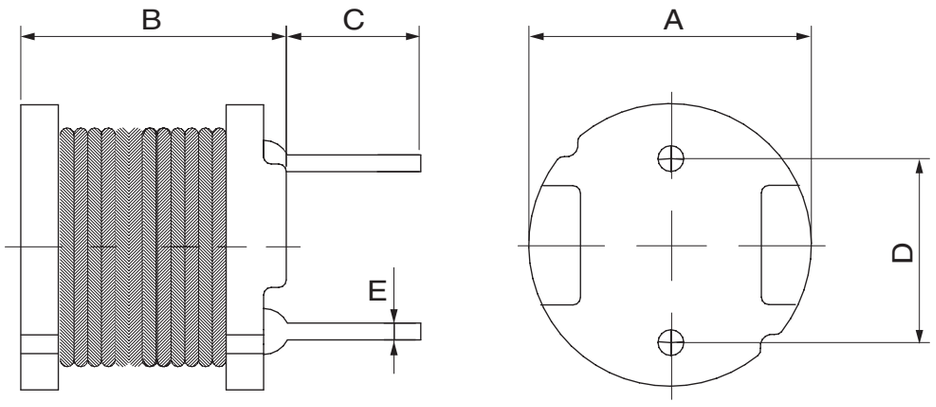
■ TYPICAL ELECTRICAL CHARACTERISTICS







PRODUCT SERIES



TYPE	DIMENSIONS (mm)				
	A	B	C	D	E
MCD-654C (22 μ H~1.0mH)	6.0±0.5	5.5Max	15±2	4.0±0.5	0.5±0.1
MCD-664C (22 μ H~1.0mH)	6.0±0.5	6.5Max	15±2	4.0±0.5	0.5±0.1
MCD-855C (10 μ H~10mH)	7.8±0.5	6.5Max	15±2	5.0±0.5	0.65±0.1
MCD-875C (10 μ H~10mH)	7.8±0.5	7.5Max	15±2	5.0±0.5	0.65±0.1
MCD-895C (10 μ H~47mH)	7.8±0.5	9.5Max	15±2	5.0±0.5	0.65±0.1
MCD-108C (10 μ H~1.0mH)	10±0.5	8.5Max	15±2	6.5±0.5	0.65±0.1
MCD-110C (10 μ H~1.0mH)	10±0.5	10.5Max	15±2	6.5±0.5	0.65±0.1

PRODUCT SPECIFICATIONS

Part No.	Inductance (μH)	Test Frequency	DC Resistance(Ω)Max.							Permissible DC Current(A)Max.						
			654C	664C	855C	875C	895C	108C	110C	654C	664C	855C	875C	895C	108C	110C
100	10 μH	2.52MHz			0.07	0.05	0.04	0.027	0.022			2.50	2.90	2.60	4.50	5.30
120	12 μH				0.08	0.06	0.04	0.031	0.023			2.40	2.50	2.60	4.10	4.90
150	15 μH				0.09	0.07	0.05	0.036	0.026			2.10	2.20	2.10	3.70	4.40
180	18 μH				0.10	0.08	0.05	0.049	0.033			2.00	1.90	2.00	3.40	4.00
220	22 μH		0.18	0.11	0.12	0.09	0.06	0.055	0.037	0.90	1.27	1.70	1.80	1.70	3.10	3.60
270	27 μH		0.21	0.14	0.14	0.11	0.06	0.062	0.048	0.81	1.14	1.60	1.70	1.60	2.80	3.30
330	33 μH		0.27	0.17	0.17	0.13	0.07	0.079	0.055	0.74	1.03	1.40	1.50	1.40	2.50	2.90
390	39 μH		0.29	0.19	0.21	0.14	0.08	0.087	0.073	0.68	0.95	1.30	1.30	1.40	2.30	2.70
470	47 μH		0.34	0.23	0.24	0.15	0.10	0.099	0.083	0.62	0.87	1.20	1.30	1.30	2.10	2.50
560	56 μH		0.42	0.26	0.31	0.18	0.11	0.13	0.092	0.57	0.80	1.10	1.20	1.20	1.90	2.30
680	68 μH		0.48	0.28	0.34	0.20	0.14	0.14	0.12	0.51	0.72	1.00	1.10	1.10	1.70	2.10
820	82 μH		0.55	0.39	0.40	0.24	0.16	0.16	0.14	0.47	0.66	0.93	1.00	1.00	1.60	1.90
101	100 μH	1KHz	0.68	0.43	0.52	0.28	0.19	0.21	0.16	0.42	0.59	0.81	0.89	0.90	1.40	1.70
121	120 μH		0.77	0.54	0.59	0.36	0.22	0.24	0.20	0.39	0.54	0.76	0.81	0.82	1.30	1.50
151	150 μH		0.95	0.64	0.71	0.42	0.27	0.32	0.23	0.35	0.48	0.67	0.72	0.74	1.20	1.40
181	180 μH		1.15	0.74	0.89	0.57	0.31	0.35	0.31	0.32	0.44	0.62	0.66	0.71	1.10	1.30
221	220 μH		1.30	0.96	1.04	0.63	0.38	0.45	0.34	0.29	0.40	0.54	0.57	0.64	0.96	1.10
271	270 μH		1.55	1.12	1.28	0.88	0.53	0.61	0.40	0.26	0.36	0.49	0.51	0.57	0.87	1.00
331	330 μH		2.18	1.48	1.47	1.05	0.61	0.69	0.52	0.23	0.33	0.44	0.46	0.51	0.79	0.93
391	390 μH		2.47	1.66	1.37	1.17	0.69	0.78	0.65	0.21	0.30	0.41	0.44	0.48	0.72	0.86
471	470 μH		2.92	1.91	1.95	1.34	0.89	1.0	0.71	0.20	0.27	0.38	0.41	0.43	0.66	0.78
561	560 μH		3.97	2.30	2.83	1.72	1.01	1.20	1.00	0.18	0.25	0.35	0.36	0.40	0.60	0.71
681	680 μH		4.57	2.67	3.25	1.96	1.18	1.40	1.10	0.16	0.23	0.32	0.33	0.35	0.55	0.65
821	820 μH		5.28	3.10	3.82	2.56	1.57	1.80	1.30	0.15	0.21	0.31	0.30	0.32	0.50	0.59
102	1000 μH		7.06	4.45	5.28	2.94	1.84	2.10	1.70	0.13	0.19	0.25	0.27	0.30	0.45	0.53
122	1.2mH				6.03	4.04	2.10					0.23	0.24	0.24		
152	1.5mH				7.15	4.70	2.80					0.21	0.22	0.23		
182	1.8mH				8.26	5.05	3.21					0.20	0.20	0.21		
222	2.2mH				11.1	6.25	4.21					0.18	0.18	0.19		
272	2.7mH				13.1	8.72	4.92					0.16	0.16	0.17		
332	3.3mH				15.9	10.6	6.16					0.14	0.15	0.15		
392	3.9mH				18.0	14.2	6.84					0.13	0.14	0.14		
472	4.7mH				23.9	16.7	7.89					0.12	0.12	0.13		
562	5.6mH				26.8	18.7	11.5					0.11	0.11	0.12		
682	6.8mH				31.7	21.8	13.52					0.098	0.10	0.11		
822	8.2mH				46.5	28.7	15.2					0.088	0.093	0.10		

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			654C	664C	855C	875C	895C	108C	110C	654C	664C	855C	875C	895C	108C	110C
103	10mH	1KHz			55.7	33.0	22.0					0.081	0.084	0.089		
123	12mH						25.0							0.073		
153	15mH						29.1							0.068		
183	18mH						38.9							0.066		
223	22mH						44.9							0.059		
273	27mH						55.7							0.052		
333	33mH						64.2							0.048		
393	39mH						74.2							0.072		
473	47mH						96.4							0.038		

Tolerance of inductance: 10~82 μH:±20% (M) 100~47000 μH:±10% (K)
The max. permissible DC current is the DC current applied which causes 10% reduction of its initial inductance value, or the coil temperature to rise by 40˚C, whichever is lower.